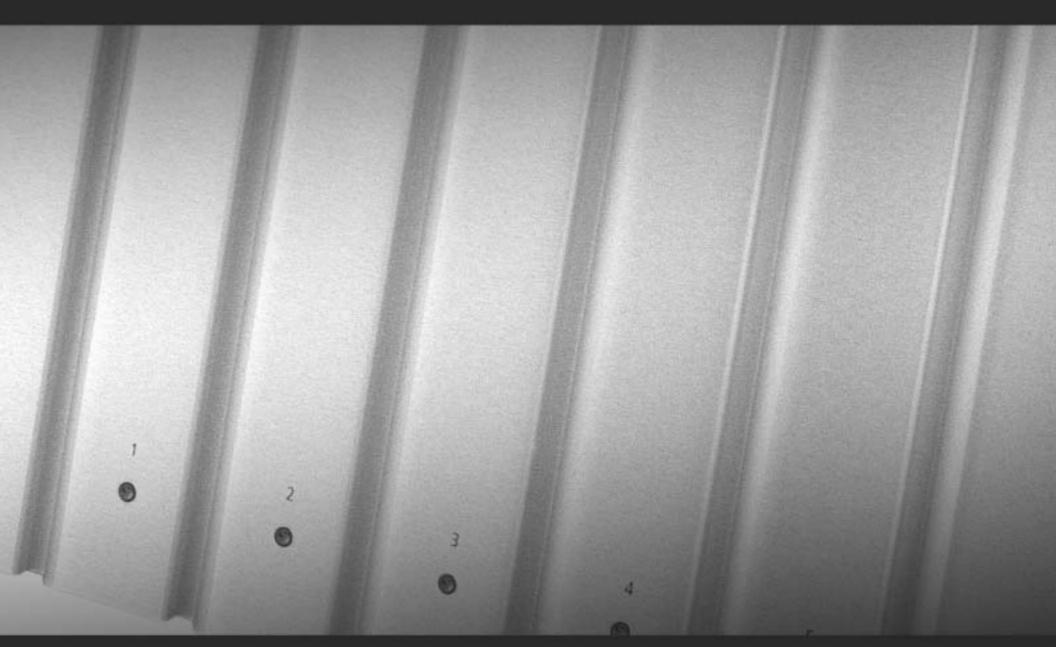


# **LX** Power Amplifier User Guide



#### IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- Do not use this apparatus near water.
- 6) Clean only with a dry cloth.
- 7) In CE countries, this amplifier is considered "professional equipment." In order to comply with CE requirements, the customer is required to obtain permission from the local supply authority before connecting this equipment.
- 8) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 9) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatuses that produce heat.
- 10) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 11) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 12) Only use attachments/accessories specified by the manufacturer.
- 13)

Use only with a cart, stand, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

- 14) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 15) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 16) To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

This triangle, which appears on your component, alerts you to the presence of uninsulated, dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.





This triangle, which appears on your component, alerts you to important operating and maintenance instructions in this accompanying literature.

#### **DOCUMENTATION CONVENTIONS**

This document contains general safety, installation, and operating instructions for the LX-5 and LX-7 Power Amplifiers. It is important to read this user guide before attempting to use these products. Pay particular attention to safety instructions.

The following symbols are used in this document:



Appears on the component to indicate the presence of uninsulated, dangerous voltage inside the enclosure voltage that may be sufficient to constitute a risk of shock.



Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in injury or death.



Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the product.

Note:

Calls attention to information that is essential to highlight.

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Fax 781-280-0499 (Service)

Lexicon Part No. 070-14876 | Rev 3 | 03/03

Introduction

#### Introduction

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Introduction LX Power Amplifiers



#### UNPACKING AND INSPECTION

After unpacking the unit, save all packing materials in case the unit ever needs to be shipped. Thoroughly inspect the modules and packing materials for signs of damage. Report any damage to the carrier at once; report equipment malfunction to the dealer.



#### AUSPACKEND UND INSPEKTION

Überprüfen Sie die Verpackung auf Beschädigung. Nehmen Sie das Gerät aus der Verpackung. Heben Sie das gesamte Verpackungsmaterial auf, falls das Gerät einmal verschickt werden muss. Überprüfen Sie alle Bestandteile auf Beschädigung. Verständigen Sie sofort den Spediteur, falls die Verpackung und/oder die Bestandteile der Lieferung beschädigt sind. Verständigen Sie sofort Ihren Händler, falls das Gerät nicht richtig funktioniert.



#### DESEMPAQUETANDO E INSPECCIÓN

Después de desempaquetar la unidad, ahorra todos los materiales del embalaje en caso de que usted alguna vez necesita enviar la unidad. Completamente inspeccione los módulos y condensando los materiales para las señales de daño. Informe cualquier daño en seguida al portador; el funcionamiento defectuoso de equipo de informe a su distribuidor.



#### DÉBALLER ET INSPECTIÓN

Après avoir déballé l'unité, sauve toutes les matières de l'emballage au cas où vous avez besoin jamais de transporter l'unité. Entièrement inspectez les modules et emballer des matières pour signes de dégât. Rapportez tout dégât au porteur à la fois; fonctionnement défectueux du matériel du rapport à votre revendeur.



#### SPACCHETTANDO ED ISPEZIONE

Dopo avere spacchettato l'unità, mai salvi tutti i materiali di imballaggio in caso che Lei ha bisogno di inviare l'unità. Completamente ispezioni i moduli e comprimendo materiali per segnali di danno. Subito riporti alcun danno al corriere; malfunzionamento di attrezzatura di rapporto al Suo rivenditore.



#### DESEMPACOTANDO E INSPEÇÃO

Depois de desempacotar a unidade, economiza todos os materiais de embalagem no caso de você já precisa transportar a unidade. Completamente inspecione os módulos e empacotando materiais para sinais de dano. Informe qualquer dano imediatamente ao portador; mau funcionamento de equipamento de relatório para seu negociante.

# Getting Started

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Getting Started Lexicon

#### ABOUT THE LX POWER AMPLIFIERS

Thank you for purchasing an LX Power Amplifier, a reference-quality amplifier designed to meet the highest standards of power and performance under even the most extreme operating conditions. Equipped with advanced thermal, DC, and speaker protection, the LX amplifiers deliver reliable and exceptional performance with most loudspeakers, including mismatched, reactive, and unusual loads. In addition, the LX amplifiers include protection against short circuits, component failures, miswiring, and internal faults.

Available in five or seven channel versions, the LX amplifiers deliver high-power performance. Each 200-Watt channel includes four custom-designed, hand-graded output transistors as well as a 160-volt power supply for extra headroom. Bridgeable architecture allows the first four 200-Watt channels to be configured with up to two 400-Watt channels for even higher-power output. Non-bridged channels are compatible with speaker impedances of  $2\Omega$  and above, and bridged channels are compatible with speaker impedances of  $4\Omega$  and above.

Complemented by the heavy-duty, gold-plated speaker output connectors, the rear panel includes selectable balanced or unbalanced audio input on RCA and XLR or 1/4-inch Tip/Ring/Sleeve connectors. A trigger input connector allows the LX amplifiers to be controlled with associated components such as the MC-12 or MC-8 Digital Controller. In addition, a ground lift switch can be used to eliminate audible hum caused from multiple grounding paths.

The LX amplifiers feature a Junction Temperature Simulation (JTS) computer that predicts the internal temperature of each output transistor to prevent overheating. Unlike similar technologies, JTS combines the output voltage and current of each output transistor

with heatsink temperatures to arrive at an accurate internal temperature prediction. As a result, JTS prevents overheating even when heatsink temperatures are relatively cool, allowing the LX amplifiers to achieve maximum performance and reliability from the output transistors.

In addition to JTS, the LX amplifiers include advanced thermal and DC protection for each channel. Thermal protection automatically deactivates channels exceeding 115°C, while DC protection prevents DC and frequencies below 10Hz from reaching the speakers. Dedicated, multi-colored channel status LEDs are located on the front panel to provide at-a-glance viewing of channel status at all times.

With THX Ultra Certification, the LX amplifiers are certified to meet the highest THX standards. Advanced thermal, DC, and speaker protection further guarantee an exceptional performance under even the most extreme operating conditions. Add to this incredible power and wide-ranging flexibility, and the LX amplifiers are at home in the most sophisticated and demanding home theaters.

LX Power Amplifiers Getting Started

#### **HIGHLIGHTS**

- 200W per channel
- Four custom designed, hand-graded output transistors per channel
- Bridgeable architecture for higher-power output (400W at  $8\Omega$ )
- Oversized toroidal power transformer with extraordinarily low DC resistance and thermal protection
- High-power supply voltage (160V) for extra headroom at the outputs
- THX Ultra Certification
- Junction Temperature Simulation (JTS) to provide maximum performance from output transistors
- Thermal protection against overheating
- Speaker protection against DC and frequencies below 10Hz
- Protection against short circuits, device failures, miswiring, and internal faults
- Stable with mismatched, reactive, or unusual loads
- Quiet, microprocessor-controlled, forced-air cooling to minimize chassis size
- Compatible with  $2\Omega$  speaker impedances (Individual Mode)
- Trigger input for power control from an external device
- RCA, XLR, and 1/4-inch tip/ring/sleeve inputs
- GROUND LIFT switch
- · Heavy-duty gold plated outputs
- Multi-color channel status LEDs
- · Rack-mount option available

#### PRODUCT REGISTRATION

Please register the LX Power Amplifier within 15 days of purchase. To do so, register online at www.lexicon.com or complete and return the product registration card attached to the back cover of this user guide. The product registration card serves no warranty purposes. Retain the sales receipt as proof of warranty coverage.

#### INSTALLATION CONSIDERATIONS

The LX Power Amplifiers require special care during installation to ensure optimal performance. The amplifiers should be installed in an equipment rack using an optional rack-mount kit available from Lexicon dealers or www.lexicon.com. Leave at least 2 inches of open space around the top, sides, and rear of the amplifier for proper ventilation.



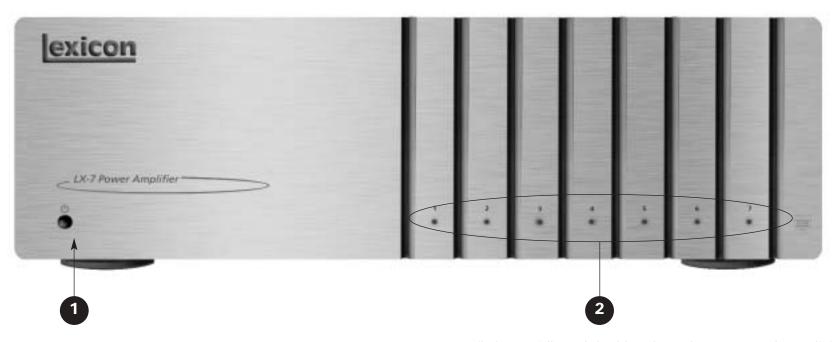
- Be careful when moving the LX Power Amplifiers, which are quite heavy.
- Do not obstruct the ventilation holes in the chassis.

# Basic Operation

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Basic Operation Lexicon

#### FRONT PANEL OVERVIEW



#### 1. Standby Button

Activates and deactivates standby mode when the LX amplifier is powered on with the rear panel power switch. The standby button performs no function when the LX amplifier is powered off with the rear panel power switch.

When the unit is on, pressing the standby button activates standby mode and deactivates the LX amplifier. When the unit is in standby, pressing the standby button deactivates standby mode and activates the LX amplifier. The red standby button LED will flash for approximately five seconds. Then, the blue channel status LEDs will light. If the red standby button LED

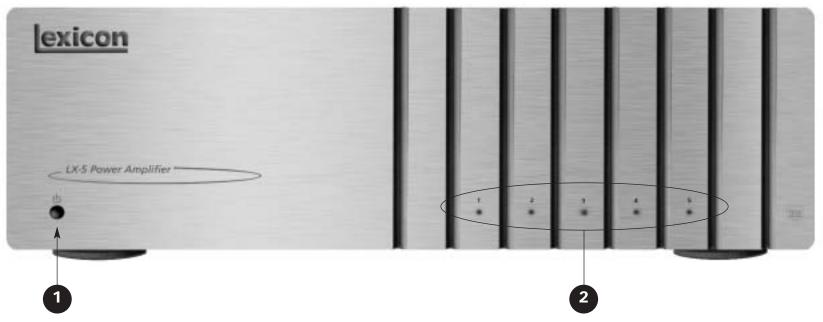
flashes rapidly and the blue channel status LEDs do not light, the incoming AC voltage is too low or the temperature of the transformer is too high. Refer to Section 3 for troubleshooting information.

#### Note:

• Power is still supplied to the LX amplifier when standby mode is activated.

LX Power Amplifiers

Basic Operation



#### 2. Channel Status LEDs

Provide at-a-glance view of the status of each channel as indicated in the table below:

Color	Status						
Constant Blue	Normal Operation						
Constant Bright Blue	≤1% distortion in the audio signal. Reduce volume level to help eliminate potentially damaging audio signals from reaching the speakers.						
Flashing Red	The temperature of the individual amplifier card is too high. If this occurs, the channel will not pass audio. The channel status LED will light blue when the temperature of the amplifier card returns to normal. Then the channel will automatically resume passing audio.						

Color	Status	(Continued)
Constant Red	A fault in the Section 3 fo information.	channel. Refer to r troubleshooting

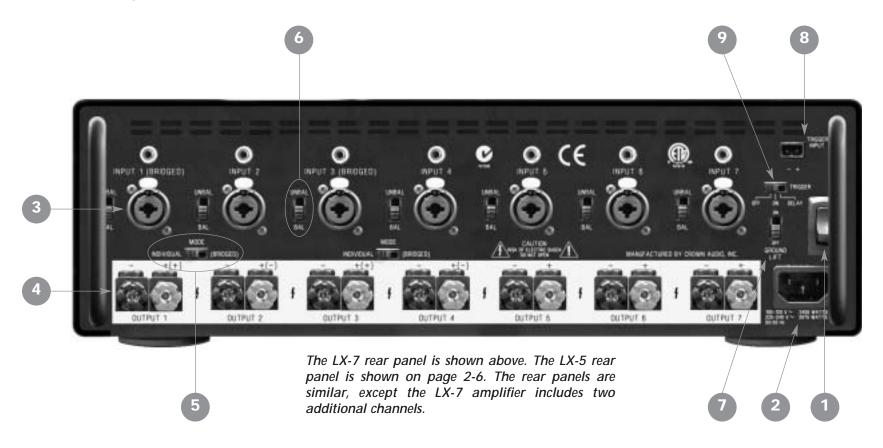
#### Note:

When the main power transformer temperature exceeds 110°C:

- the transformer will deactivate
- •the channel status LEDs will no longer be lit
- •the standby LED will flash rapidly

Basic Operation Lexicon

#### **REAR PANEL OVERVIEW**





WARNING

External wiring connected to connectors marked with the triangle pictured at the left requires installation by an instructed person or the use of ready-made leads or cords.

LX Power Amplifiers

Basic Operation

#### 1. Power Switch

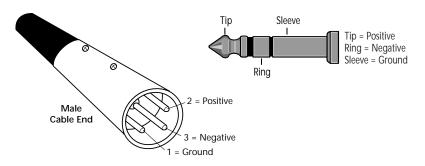
Disconnects power to the AC Input Connector. Set this switch to off when making or breaking connections to the amplifier, or when changing the setting of the MODE switch.

#### 2. AC Input Connector

The AC input connector provides power to the unit with the supplied power cord (3 conductor, 14AWG). Do not use an extension cord. For optimal performance, use an isolated power receptacle with adequate current (15 or 20 amps). Line voltages ≥10% above the specified voltage may damage the amplifier. Line voltages ≤10% below the specified voltage may cause the amplifier to enter a protection mode, indicated by the red standby LED flashing.

#### 3. INPUT 1 to 7 (LX-7) or 1 to 5 (LX-5)

Provide audio input for the speakers connected to the corresponding audio outputs. When using the unbalanced (RCA) audio inputs, make sure the UNBAL/BAL switch located to the left of each XLR connector is set to UNBAL. When using the balanced (XLR or 1/4-inch tip/ring/sleeve) audio inputs, make sure the UNBAL/BAL switch is set to BAL. The illustrations below show the appropriate cable ends for 1/4-inch T/R/S and XLR connectors.



#### 4. OUTPUT 1 to 7 (LX-7) or 1 to 5 (LX-5)

Provide audio output for the speakers. OUTPUT connectors can accept bare speaker wires, banana plug connectors, or certain spade connectors. When using bare speaker wires, loosen the connector, insert the wire into the top of the receptacle, then tighten the connector. The same procedure should be used for spade connectors. Banana plugs should be inserted into the outward-facing receptacle.

Use heavy gauge speaker cable to ensure low-impedance connections between the amplifier and the speakers. Observe correct speaker polarity.



Do not connect the OUTPUTs of one channel to the OUTPUTs of other channels or to other amplifiers.

#### Note:

If the rear panel MODE switch is set to INDIVIDUAL, speakers must have impedance ratings of  $2\Omega$  or higher. If set to (BRIDGED), speakers must have impedance ratings of  $4\Omega$  or higher. Using speakers with lower than recommended impedance ratings might activate protection modes.

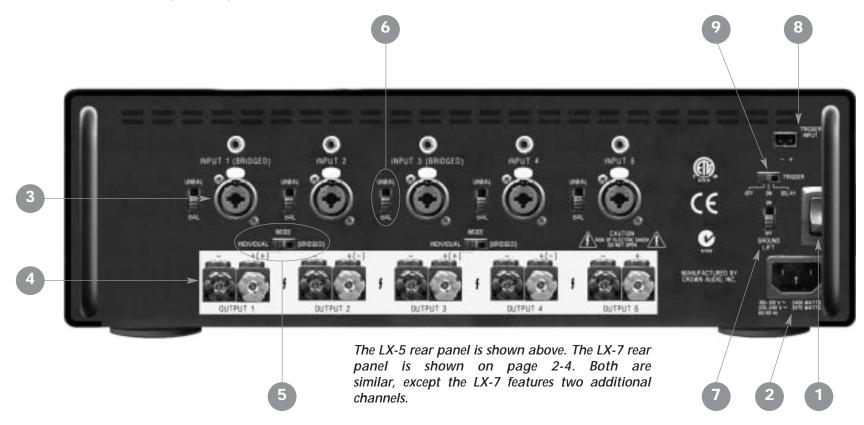
#### 5. MODE Switch

Configures channels 1 and 2 or 3 and 4 for INDIVIDUAL or (BRIDGED) operation. When set to INDIVIDUAL, all INPUTs and OUTPUTs function as separate channels. When set to (BRIDGED), the selected INPUTs and OUTPUTs are combined to create a single high-power channel.

. . . continued on page 2-7

Basic Operation Lexicon

#### **REAR PANEL OVERVIEW** (continued)





WARNING

External wiring connected to connectors marked with the triangle pictured at the left requires installation by an instructed person or the use of ready-made leads or cords.

LX Power Amplifiers Basic Operation

#### 5. MODE Switch (continued from page 2-5)

Make sure the amplifier is powered off when the MODE switch setting is changed.

INPUTs and OUTPUTs used in (BRIDGED) mode are labelled in parenthesis. Do not use other INPUTs and OUTPUTs that are not labelled in parenthesis. Connect the positive speaker lead to the positive (red) OUTPUT of the first channel, and connect the negative speaker lead to the positive (red) OUTPUT of the second channel.

#### 6. UNBAL/BAL Switch

Selects between unbalanced (RCA) or balanced (XLR, tip/ring/sleeve) audio input for each channel. Power the amplifier off or reduce system volume before changing the setting of the UNBAL/BAL switch. If the amplifier is connected to a digital controller such as the MC-12 or MC-8, output levels should be re-calibrated whenever the setting is changed.

#### 7. GROUND LIFT Switch

When set to ON, isolates the ground connection between the audio inputs and the chassis. This can be useful for eliminating audible hum or noise caused by multiple grounding paths in the system. When set to OFF, the audio inputs are grounded to the chassis. This switch should be set to ON whenever there is ground noise present in the system.

WARNING

Do not defeat or remove the ground prong on the AC power cord. This will result in a safety hazard, and will not reduce audible hum. The GROUND LIFT switch has no effect on the safety ground of the amplifier.

#### 8. TRIGGER INPUT

Enables the amplifier to be controlled by the MC-12/MC-8 or other external devices with a 12V DC trigger output. Connect the trigger output of the external device to the TRIGGER INPUT of the amplifier, and set the TRIGGER switch on the amplifier to ON or DELAY. The amplifier will automatically respond when the external device is powered on and off.

#### 9. TRIGGER INPUT Switch

When set to OFF, the amplifier only powers on and off in response to the front panel standby button. When set to ON or DELAY, only the external device connected to the TRIGGER INPUT can be used to power the amplifier on and off. The front panel standby button will not power the unit on and off. (However, the standby LED still functions normally.) When set to DELAY, the normal 5 second power on delay is extended to approximately 7 seconds.

The TRIGGER INPUT Switch setting will not take effect until the amplifier has been power cycled.

Basic Operation Lexicon

#### **COOLING SYSTEM**

The LX Power Amplifiers use temperature-controlled fans to exhaust heat. Heatsink temperatures are measured hundreds of times each second. Under most conditions, the fans are set to a slow speed. When the temperature climbs above 85°C, the fans are set to a medium speed. When the temperature climbs above 100°C, the fans are set to a high speed.

#### PROTECTION MODES

The LX amplifiers are equipped to protect against overheating and miswiring, as well as electrical failures such as short circuits, device failures, internal faults, and DC output to the speakers. A combination of dedicated circuitry and microprocessor control ensures that the amplifier will perform safely and reliably under extreme conditions.

#### THERMAL PROTECTION

JTS (Junction Temperature Simulation) provides an advanced level of thermal protection that allows the LX amplifiers to achieve maximum performance with a minimum number of output transistors. This design requires a smaller quantity of high-quality output transistors, enhancing performance and reliability.

JTS predicts the internal temperatures of output transistors to prevent them from overheating. To arrive at an accurate internal temperature prediction, JTS measures the output voltage and current each output transistor delivers and combines this information with heatsink temperatures. When an output transistor reaches its maximum allowable temperature, it is instantly restricted until the temperature decreases.

JTS's dynamic nature enables it to avoid the problems inherent in competing products that rely only on heatsink temperatures. Heatsink temperatures do not always correlate to the temperatures inside the output transistors. JTS is calibrated by device parameters, which allow it to predict overheating even if the heatsinks are relatively cool.

When JTS activates, a distorted signal will be present in the corresponding channel. Check the airflow around the amplifier and take the following measures:

- Provide additional cooling.
- Make sure speakers have adequate impedance ratings (see page 2-5).
- Reduce system volume level.

In addition to the protection provided by JTS, the amplifier includes thermal protection for each channel and the main power transformer. If a heatsink temperature exceeds 115°C, the channel will deactivate and the corresponding channel status LED will flash red. When the heatsink cools below 115°C, the channel will automatically reactivate and the corresponding channel status LED will light blue.

If the main power transformer temperature exceeds 110°C, the transformer will deactivate, all channel status LEDs will no longer be lit, and the standby LED will flash rapidly. The internal fans will automatically be set to full speed to cool the transformer. Once the transformer has cooled enough, it will automatically be reset and the amplifier will operate normally. The channel status LEDs will light blue, and the standby LED will no longer be lit.

LX Power Amplifiers Basic Operation

#### DC PROTECTION

Each channel includes DC protection to prevent DC and frequencies below 10Hz from reaching the speakers. If this protection activates, the output relay will open and the corresponding front panel channel status LED will no longer be lit. After approximately 4-seconds, DC protection will be automatically deactivated. The relay will close and the corresponding channel status LED will light blue. If DC or frequencies below 10Hz are still present, DC protection will be automatically reactivated. The amplifier will continue to engage this protection until the problem is no longer present.

## Troubleshooting & Maintenance

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#### **TROUBLESHOOTING**

#### No front panel LEDs are lit.

 Make sure the unit is plugged in and the rear panel power switch is set to on.

#### The Standby LED is flashing rapidly.

- 1. Power the amplifier off. Allow the amplifier to cool before powering it on again.
- 2. Check the incoming line voltage. It should not be more than 10% below the mains supply voltage indicated in the Specifications (page A-2).

### One or more channels is not passing audio, and the corresponding channel status LED is flashing red.

- 1. Reduce system volume level.
- 2. Power the amplifier off. Allow the amplifier to cool before powering it on again.

#### A channel status LED is lit red.

 Contact an authorized Lexicon dealer or Lexicon customer service.

#### The standby button does not appear to be functioning.

- 1. Make sure the rear panel power switch is set to on.
- 2. Make certain the rear panel TRIGGER INPUT switch is set to OFF.

### One or more channels is not passing audio, but the corresponding channel status LED is lit blue.

- 1. Make sure the UNBAL/BAL switch is set to the connector being used (UNBAL for RCA and BAL for 1/4 inch or XLR).
- 2. Reduce system volume level.

#### Audio sounds out-of-phase.

- 1. Power the amplifier off with the rear panel power switch. Make sure the MODE switch is set to the current configuration.
- 2. Check to ensure proper speaker wiring.

#### A humming sound is present in the audio.

1. Set the GROUND LIFT switch to ON.

#### One or more channels is outputting distorted sound.

- 1. Reduce system volume level.
- 2. Check the airflow around the amplifier and take the following measures:
  - Provide additional cooling.
  - Make sure speakers have adequate impedance ratings (see page 2-5).

## The TRIGGER INPUT is connected to an external device, but the amplifer does not power on and off with the external device.

1. Make sure the TRIGGER INPUT switch is set to ON or DELAY.

The amplifier and other electrical devices in the listening room suddenly lose power.

1. Reset the circuit breakers for the affected device(s).

#### If all else fails . . .

- 1. Contact an authorized Lexicon dealer.
- 2. Contact Lexicon customer service.

#### Note:

Visit www.lexicon.com for answers to frequently asked questions and additional troubleshooting information.

#### **MAINTENANCE**

The following routine maintenance should be performed on a periodic basis:

 Clean the exterior surfaces of the unit with a soft, dry, lint-free cloth. Do not use alcohol, benzene, acetone-based cleaners, or strong commercial cleaners. Do not use a cloth made with steel wool or metal polish. If the unit is exposed to a dusty environment, a low-pressure blower may be used to remove dust from its exterior.

# **A**Appendix

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#### **SPECIFICATIONS**

Audio Input Connectors								
LX-7	• 7 RCA, 7 XLR (including 1/4-inch Tip/Ring/Sleeve)							
LX-5	• 5 RCA, 5 XLR (including 1/4-inch Tip/Ring/Sleeve)							

Audio Output Con	nectors
LX-7	7 pairs of heavy-duty binding posts
LX-5	5 pairs of heavy-duty binding posts

Performance									
Amplifier performance specifications are identical in INDIVIDUAL and (BRIDGED) Modes, with the exception of Output Power and Minimum Speaker Impedance. (BRIDGED) Mode includes channels 1 & 2 and 3 & 4 only.									
Output Power	<ul> <li>200W at 8Ω, all channels driven</li> <li>20Hz to 20kHz</li> <li>400W at 8Ω, (Bridged)</li> </ul>								
Minimum Speaker Impedance	• $2\Omega$ , INDIVIDUAL Mode • $4\Omega$ , (BRIDGED) Mode								
Frequency Response	<ul> <li>20Hz to 20kHz ±0.1dB</li> <li>10Hz to 100kHz +0.5/-3dB</li> </ul>								
THD	• Below 0.02% at 200W, 8Ω all channels driven 20Hz to 20kHz								

Performance (Continued)								
Signal-to-Noise Ratio	• 111dB							
	22kHz bandwidth, balanced inputs							
	100 15							
	• 109dB							
	22kHz bandwidth, unbalanced inputs							
	(Ref 200W at 8Ω)							
IM Distortion	• Below 0.03% at 200W, 8Ω							
Crosstalk	• -80dB at 1kHz, minimum							
Damping Factor	• 250 at 20Hz, minimum							
Input Sensitivity	• 2V in for 100W out at $8\Omega$ ,							
	balanced inputs							
	• 1V in for 100W out at $8\Omega$ ,							
	unbalanced inputs							
Input Impedance	<ul> <li>20kΩ, balanced</li> <li>10kΩ, unbalanced</li> </ul>							
	- 10/22, ulibalanceu							
Gain	•23 dB, balanced							
	•29dB, unbalaced							

Other		
Trigger Input	• 12V DC +/- 10%	
Power Requirements	• 120V 60Hz 20 (Domestic) • 230V 50Hz 12.5A (Export)	

LX Power Amplifiers Appendix

Other (Continued)		
Weight		
LX-7	• 56lbs (25.4kg)	
LX-5	• 52lbs (23.6kg)	
Rack Mounting	Optional brackets are available for mounting either amplifier in standard 9-inch equipment rack	

Specifications are subject to change without notice

#### **DECLARATION OF CONFORMITY**

Application of Council Directive(s): 89/336/EEC and 93/68/EEC

Standard(s) to which Conformity is Declared: EN 55103-1:1995, EN 61000-3-3:1995,

EN 55022:1992 (Class B), EN 55103-2:1996, and EN 60065:1998

Manufacturer: Lexicon, Inc.

3 Oak Park

Bedford, MA 01730-1441 USA

The equipment identified here conforms to the Directive(s) and Standard(s) specified

above.

Type of Equipment: LX-5 and LX-7 Power Amplifiers

Model: Lexicon LX-5 and LX-7

Date: March 2003

Lexicon, Inc.

Vice President of Engineering

3 Oak Park

Bedford, MA 01730-1441 USA

Tel: 781-280-0300 Fax: 781-280-0490

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# LIMITED WARRANTY

Lexicon, Inc. offers the following warranty on this product:

#### What is the Duration of this Warranty?

This warranty will remain in effect for five (5) years from the original date of purchase.

#### Who is Covered?

This warranty may be enforced by the original purchaser and subsequent owners during the warranty period, provided the original dated sales receipt or other proof of warranty coverage is presented at time of service.

#### What is Covered?

This warranty covers all defects in material and workmanship on this product, except as specified below. The following are not covered:

- 1. Damage resulting from
  - A. Accident, misuse, abuse, or neglect.
  - B. Failure to follow instructions contained in the user guide.
  - C. Repair or attempted repair unauthorized by Lexicon, Inc.
  - D. Failure to perform recommended periodic maintenance.
  - E. Causes other than product defects, including lack of skill, competence, or experience on the part of the owner.

- Damage occurring during any shipment of this product. Claims for shipping damages must be made with the carrier.
- 3. Damage to a unit that has been altered, or on which the serial number has been defaced, modified, or removed.

#### What Expenses will Lexicon, Inc. Assume?

Lexicon, Inc. will pay all labor and material expenses for covered items. Payment of shipping charges is discussed in the next section of the warranty.

#### How is Service Obtained?

When this product needs service, write, telephone, or fax Lexicon, Inc. to request information about where the unit should be taken or sent. When making a written request, please include your name, complete address, and daytime telephone number; the product model and serial numbers; and a description of the problem. Do not return the unit to Lexicon, Inc. without prior authorization.

#### When Shipping a Product for Service . . .

- Pay any initial shipping charges, which are the responsibility of the owner. If necessary repairs are covered by this warranty, Lexicon, Inc. will pay return shipping charges to any destination in the United States using the carrier of our choice.
- 2. Pack the unit securely. Package insurance is strongly recommended.

- Include a copy of the original dated sales receipt. (A copy of the original dated sales receipt must be presented whenever warranty service is required.)
- 4. Do not include accessories such as power cords or user guides unless instructed to do so.

#### What are the Limitations of Implied Warranties?

Any implied warranties, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this warranty.

#### What Certain Damages are Excluded?

Lexicon's liability for a defective product is limited to repair or replacement of that product, at our option. Lexicon, Inc. shall not be liable for damages based on inconvenience; loss of use of the product; loss of time; interrupted operation; commercial loss; or any other damages, whether incidental, consequential, or otherwise.

#### How do State Laws Relate to this Warranty?

Some states do not allow limitations on the duration of implied warranties and/or the exclusion or limitation of incidental or consequential damages. As such, the above limitations may not apply.

This warranty is not enforceable outside of North America. This warranty provides specific legal rights. Additional rights may be provided by some states.



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**Customer Support** 

Tel 781-280-0300 Fax 781-280-0495 (Sales) Fax 781-280-0499 (Service)



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